

A Study of Psychological Aspects of Food Delivery Personnel during Covid times

Abstract

The Covid-19 induced lockdowns had severe effects on service industries and their employees. The researchers have primarily focused on the healthcare workers, their mental well-being and the evolving consumer behaviour in retail industry. Yet, the impact of the pandemic on the frontline retail employees especially those engaged in the food delivery is an under-researched area. In this qualitative study, the authors research the changed working conditions and the related occupational stress of the food delivery personnel from five major cities and towns in India. The findings have been categorised under three themes: perceived threat (source of anxiety and stress), self-protective behaviour (fear related) and perceived benefits (Coping behaviour).

Keywords: Food delivery personnel, pandemic, Health Belief model, stress, fear, coping behaviour

Introduction

The COVID-19 pandemic has universally impacted the national economies and the industries part of the economies. Even though the world has experienced multiple natural outbreaks like SARS (2004), H1N1 (2009), Ebola (2016), Nipah virus (2019) (Hung et al., 2018), the impact of coronavirus across the geographies, economies, industries, organizations and human lives and lifestyles is unprecedented. The severity of the pandemic and its spread can be gauged by the fact that World Health Organization (WHO) proclaimed COVID-19 a pandemic as early as in December 2019.

The hospitality industry and its sub-sectors of accommodation, restaurants, tourism, transportation and the associated services too were deeply impacted by the pandemic. In order to support the industry and the workforce, the Indian statutory authorities categorized food, preparation, delivery and such other services under the ambit of essential services. This allowed the food and beverages (F&B) outlets, and food delivery platforms to re-start their operations during pandemic times. This had a two-way positive effect. Firstly, it generated employment for the F&B organizations and secondly, the consumers including students, working professionals struck due to lockdowns, paying guests constituting approx. 20% of

the total population (Shrivastava, 2020). Furthermore, Centre for Disease Control and Prevention recommended 'Use online services when available' as part of self-protective measures to control the pandemic spread (CDC, 2020). This resulted in a lifeline to the struggling industry. This is evident from the number of deliveries which increased exponentially for most of the food delivery services. Zomato India, a leading OFDA (online food delivery app) in India, reported its highest ever GOV (Gross Value Order) since its inception during the 1st quarter of 2021 i.e. April-June, the time when the second wave of COVID-19 was at its peak. Out of 1 billion deliveries made since its inception in 2008, Zomato delivered more than 10% i.e., 100 million orders were delivered during the pandemic's second wave.

But the increasing deliveries has resulted in new forms of threats to the nascent food delivery business (Keelery, 2020). These have the potential to negatively affect the survival, growth and the very business model of the OFDAs. The OFD (online food delivery) can aid in faster spread of the dreaded coronavirus spread and this has been confirmed and reiterated in different respected news channels (The Times of India, 2020). Hence, the threat perception of being infected due to OFDs is relatively high. F&B outlets and restaurants, mainly OFDAs, are willing to supply food but they face significant challenges. Primarily, among them is the food delivery personnel (FDP). The last mile human connect who are the linkage and face of the OFDAs. Food delivery personnel (FDPs), is one human-employee segment which faced unprecedented challenges due to factors like social distancing, lock-downs, poor working conditions besides others. Mehroli et al. (2020) too identified the health of the FDPs as a critical issue facing the food delivery industry.

The strictly enforced regulations to maintain social distancing, work from home, severely restricted movements in an attempt to slow the transmission of virus (Canipe, 2020) resulted in global suffering in terms of peoples' physical and psychological health. The industries were not left untouched and, particularly the restaurant industry suffered huge losses due to these directives.

Review of Literature

Background of Online Food Delivery Industry

Hoffman et al. (2010) described goods as tangible objects, and/or things and services as actions, or efforts. In the present times, with professional commitment taking precedence, nuclear families and convenience afforded by OFDAs, consumers are preferring to either eat out or order food regularly against preparing a meal at home. Resulting in creation and proliferation of online food delivery services (Chen and Hsieh, 2017). OFDAs have been posited as digital platforms, providing myriad services ranging from the food order, logistics, monitoring and payment of the process (Pigatto et al., 2017). The initial business model did not include the preparation of the food but the advent of cloud kitchens and lure of higher margins in private labels has led to a few OFDAs pivoting towards food preparation too (for ex. Fasoos).

Globally, the advent, proliferation and rising popularity of the food delivery platforms has transformed the communication and relationship between the F&B outlets and the consumers. The food delivery applications (FDAs) or digital platforms are a business model to provide online-to-offline service. It provides convenient ordering to the consumers either through mobile apps or website and ensures and efficient time-bound delivery of the desired food products. The FDAs have been increasingly gaining popularity as evidenced by increasing apps downloads and their revenue over a period of time. In pre-pandemic time as per Statista (2019) report FDA revenue rose from US\$ 95.4 in 2018 to US\$ 107.4 billion USD in 2019. As per industry estimates (IMARC, 2020) the revenue is further expected to reach US\$ 164.5 billion by 2024. Chai and Yat, (2019) assert that the evolving profile of urban consumers and increase in the number of the working population are the factors responsible for increase in FDAs. Further, the research by Das and Ghose (2019) hold the paucity of time of working professionals, nuclear families and changing work–life culture as the reasons for proliferation of FDAs. In India, the number of orders by Zomato almost quadrupled in 2020 to 214 million in H1 of 2020 from corresponding time in 2019 (55 million orders) (Statista, 2022).

The Coronavirus induced pandemic had a severe negative impact on the OFDAs business due to the strict safety regulations put in place to reduce the risk of transmission. Out of the number of directives, the regulations prohibiting direct human contact and the practice of social distancing were the ones most impactful on OFDAs business operations. Simultaneously, there were some positive effects too for OFDAs. The pandemic changed many customers' eating habits, accelerating the need for food delivery services. In a study in China, Cepel et al. (2020), estimated an average increase of 71% in the number of customers using FDAs during the COVID-19 during first quarter of 2020 when the first wave of

pandemic was spreading globally. The COVID-19 pandemic presented an unseen growth opportunity to the OFDAs. At one hand, while the earlier reluctant consumers transitioned towards online deliveries, on the other hand, restaurants, unable to serve dine-in too welcomed the collaboration with the OFDAs. The curfews and lockdowns meant that most of the customers were homebound and therefore were willing to pay higher delivery fees, while the FDPs, faced with lack of earning opportunities and alternative job options, were willing to take work in difficult conditions, and accept low wages Li et al. (2020).

The Stress And Anxiety Factors In The Delivery Personnel

The food delivery personnel (FDP) segment of workers lack a predictable work schedule, generally working at odd times, in shifts and need to work at irregular time periods of the day or night throughout their employment. This is compounded by multiplicity of jurisdictions (Central, state, municipal) which have limited statutory provisions for these workers (e.g., sanitized work conditions, time limitations, fatigue management) – further leading to instability. The salaries or the monetary compensation has a high proportion of variable component which is based on number of deliveries, timeliness of delivery, customer reviews and ratings. This, unpredictability in both the income expected to be earned at the month-end and work timelines are a leading cause of high levels of stress (Li et al.,2020). The irregular working hours are major cause of stress due to constant changes in sleep timings, depriving the mind and body the much-needed rest. This is further compounded by the need to balance work with the personal lives. Prolonged stress come within large segments of FDPs has led them to experiencing depression, mental and physical fatigue, burnout and is a leading cause of substance abuse among the FDPs (Hamre & Pianta, 2005). Prolonged stress is hypothesized to impact service ecosystem and the quality of OFDA and the customer relationship (Hamre & Pianta, 2005).

Kyriacou (2001) describes stress as a negative emotional experience which leads to unpleasant feelings of anger, anxiety, tension, and frustration. Lazarus & Folkman (1991) has linked stress with particular triggers, whether in personal lives, environmental or occupational. Within the later, occupation-related stress is caused in the jobs where the work demands are perceived as excessive while the incentives, growth opportunities, autonomy, and independent decision- making are either absent or very low (Guglielmi & Tatrow, 1998).

The OFDAs industry is one of the most critiqued industry due to their work conditions and personnel policies. As evidenced by recent media news and lawsuits, many food delivery

employees believe their employers to be providing an unregulated and unfair workplace (Todoli-Signes, 2018). Yet, there is lack of substantial research in this area. The primary evidence suggests that FDPs suffer from poor psychological and physical health. The multiple reasons for the occupational stress relate to work conditions, unhygienic surroundings, absence of physical rest during the work hours, pressure of timely deliveries, and consumer based subjective evaluation leading to prolonged psychological stress. Accordingly, there have been calls for in-depth research analysing and addressing the factors affecting the physical and mental health of FDPs. Scholars (Duong, 2021; Laato et al., 2020; Yin and Ni, 2021) believe that the fear of coronavirus transmission (enhanced by regular announcements on media channels) is likely to cause suspicion in the customer's mind about the fitness of the FDP, thereby, leading to avoidance behaviour which will negatively impact the livelihood of the FDPs. Consequently, they will face more anxiety and stress.

Theoretical underpinning

The Health Belief Model (HBM) assists in understanding, explaining and predicting an individual's health-related behaviour. The model enumerates the influential factors towards the health-related behaviour. These factors include: - an individual's perceived vulnerability to infection (perceived threat), the belief about its effect (perceived severity), positive benefits of preventive action, if any, (perceived benefits), perceived challenges towards preventive action (Abraham & Sheeran, 2014; Jeong & Ham, 2018).

During the spread of contagion, individuals display self-protective behaviour i.e., they behave in a manner to either eliminate or at least minimize the possibility of getting infected. Additionally, self-protective behaviour refers to a defensive action undertaken to reduce an individual's or group's susceptibility to risk (Ehrlich & Becker, 1972). Food Delivery Personnel (FDPs) are among the most vulnerable groups to the pandemic. Their work description necessitates them to meet score of strangers daily, who might have been suffering from the virus. Economically, too FDPs are at the lowest rung of earnings and lack proper nutrition and medical facilities making them vulnerable to the pandemic. Since, HBM focuses on an individual's beliefs about the prevalence of disease and their perception about severity, threats and benefits, if any, we have used this model to understand the psychological impact of pandemic on the FDPs.

Perceived threat:

Perceived threat refers to beliefs about the severity of an infection and the level of proneness, an individual believes themselves to be in (Berg & Lin, 2020; Janz & Becker, 1984). Researchers (Jeong & Ham, 2018; Manika & Golden, 2011) have combined susceptibility with the degree of severity to posit one construct, viz. perceived threat.

In the present study, perceived susceptibility refers to FDPs perception of the risk of contracting the Coronavirus due to their work-related commitments. Perceived severity refers to FDPs feelings about the degree of seriousness of coronavirus on their health. The perception of severity is a transient feeling which can change on a fairly regular basis, depending upon how the FDPs consider the medical, economic and social consequences of the virus (Bish & Michie, 2010). Accordingly, for the FDPs the perceived threat of Covid-19 may have been increased by daily news reports of increasing infection figures, high mortality rates, news on different media, mutual discussions, perspectives from the society at large.

Perceived benefits:

An individual's health-related behaviour is affected by their perceived benefits and perceived risk of taking action (Carpenter, 2010). 'Perceived benefits are referred to as an individual's understanding of the efficacy of engaging in a particular health-related behaviour due to the perceived reward(s)' (Janz & Becker, 1984). Herein, the person indulges in the activity which might render him vulnerable to health-related issues but they perceive the awards to be greater than the risk involved (Jeong & Ham, 2018). During the pandemic while consumers brought food items through OFDAs, the FDPs too gained economically by earning higher commissions, incentives, and were able to save for future needs.

Self-Protective Behaviour:

Self-protective behaviour refers to as a function of threat perceived by an individual (Jacoby & Kaplan, 1972). The self-protective behaviour is intrinsically related with the threat perception. During pandemic outbreaks, whether Mad Cow disease, Bird Flu, SARs, and COVID-19, this self-protective behaviour is significantly displayed by the individuals. Researchers (Addo et al., 2020; McKercher & Chon, 2004) have concluded that the fear of being infected spreads faster than the disease in actuality. Thus, any increase in fear can lead to anxiety which can lead to the desire of self-preservation or exacerbate the negative emotions within humans (Chuo, 2014; Setbon et al., 2005). These fear perception patterns have been previously observed in diverse service industries like travel (Lau et al., 2004),

tourism (Pine & McKercher, 2004) and supply chain (Kumar, 2012). Hence, we can conclude that FDPs are also likely to display the same self-protective behaviour.

Extant literature (Shen et al., 2020; Wise et al., 2020) has found relationship between fear appeal and the subsequent behaviour of respondents to pandemic diseases (such as bird flu, mad cow disease, Nipah bat virus). These previous studies, a few of them enumerated below, were primarily focused on the consumer behaviour during pandemic, ignoring the service providers and their vulnerabilities and state of mind.

- Truong, D., & Truong, M. D. (2022). How do customers change their purchasing behaviors during the COVID-19 pandemic?.
- Showrav et al. (2021) Determinants of online shopping: Explore factors influencing the rapid growth of online shopping during COVID 19
- Yan et al. (2021) Determinants of online shopping: Determine key factors influencing consumers online shopping
- Al-Hattami (2021) Determinants of online shopping: Study intention to continue using online shopping under COVID-19
- Prasad and Srivastava (2021) Determinants of online shopping: Investigate customers' switching behaviors during the Covid-19
- Eger et al. (2021) Determinants of online shopping: Examine trends and impacts of the COVID-19 pandemic on consumer buying behaviour.
- Itani, O. S., & Hollebeek, L. D. (2021). Consumers' health-locus-of-control and social distancing in pandemic-based e-tailing services.

To the authors best knowledge, the present study is the first attempt to research the effects of pandemic on the working conditions and the related psychological conditions of the food delivery personnel. Accordingly, the following research objectives have been framed:

Firstly, to reflect and understand the changed working conditions of the food delivery personnel due the pandemic related reasons.

Secondly, to understand the psychological impact of the changed working conditions on the food delivery personnel.

Research methodology

The objective of the study was to analyze the information about the changed working conditions and the psychological impact on the delivery personnel during the covid times. Therefore, the food delivery personnel were our sole respondents. Accordingly, the FDPs were identified from different parts of Delhi-NCR. The eligibility criteria for the respondents were defined as:

- i. Should have been delivering at least from 3 months prior to the pandemic induced lockdowns and/or restrictions
- ii. Delivery should be the full-time occupation of the respondent

A draft questionnaire (Annexure-1) was prepared to assist in the semi-structured interviews. The random snowball sampling was deployed for the selection of respondents. A few of the respondents were offered financial incentives up to Rs. 100 (US\$1.5) for their time. Kvale (1996) estimated that for qualitative research, the respondents number can lie between 15±10 whereas for academic publication, as per Warren (2002) between 20 and 30 respondents are required. Hence, the author planned on 30 interviewees from at least 4 different cities and towns of NCR. A total of 26 delivery personnel agreed to take part in the study, from 5 regions of Delhi-NCR viz. Delhi, Gurugram, Faridabad (Haryana) and NOIDA and Ghaziabad (Uttar Pradesh). These regions represent a healthy mix of urban-semi urban and rural population, demographically they have diversity in age-groups, professions, income group and lifestyle.

Table-1.: Respondent profile -

S.No.	Respondent Gender, Age, location, Employer	Duration of working (months)
R1.	Male, 22 yrs, Delhi, Zomato	19
R2.	Male, 34, Delhi, Zomato, Swiggy	36
R3.	Male, 27, Faridabad, All	22

R4.	Male, 20, Delhi, Swiggy, Amazon, Eatfit,	25
R5.	Male, 31, Delhi, Swiggy, Eatsure	28
R6.	Male, 44, Faridabad, Zomato, Swiggy	45
R7.	Male, 28, Delhi, All	24
R8.	Male, 36, Gurugram, Box8, Zomato	36
R9.	Male, 22, Gurugram, UberEats, Freshmenu,	18
R10.	Male, 24, Gurugram, Swiggy, Amazon	12
R11.	Male, 38, Gurugram, Zomato, Box8, Freshmenu	24
R12.	Male, 18, Gurugram, All	08
R13.	Male, 32, Delhi, Swiggy, Eatfit	24
R14.	Male, 36, Delhi, Zomato	30
R15.	Male, 23, Faridabad, Eatfit, Zomato, Fasoos	18
R16.	Male, 27, Noida, Swiggy, Eatfit,	24
R17.	Male, 31, Noida, Zomato, Amazon, Swiggy	36+
R18.	Male, 35, Noida, Uber Eats, Swiggy	18
R19.	Male, 20, Noida, Zomato, Swiggy,	24+
R20.	Male, 25, Noida, Zomato	12
R20.	Male, 29, Faridabad, Swiggy	18
R21.	Male, 24, Noida, Zomato, Fasoos	24
R22.	Male, 30, Delhi, Zomato, Swiggy	28
R23.	Male, 45, Ghaziabad, all	36+
R24.	Male, 28, Ghaziabad, Swiggy	15
R25.	Male, 30, Ghaziabad, Swiggy, Zomato, Eatfit	12
R26.	Male, 44, Ghaziabad, Zomato	36+

The initial questions were based on their demographic profile, general working conditions, afterwards probing questions were asked, about the changes they have observed in the working conditions during pandemic times, financial impact, their grievances, positive effects, coping mechanism. A basic Interview questionnaire was pre-shared with the potential respondents in order to make them comfortable. All the interviews were taken telephonically

except two which were done personally. This ensured adherence to the social distancing protocols and convenience for the FDPs too. Interviews were conducted over a period of 2 months in June and July 2021 when the second wave of covid-19 was peaking in India. Each of the interview lasted between 25 and 45 minutes. The author recorded the interviews. Later the interviews were translated into English, and analyzed using Nvivo 11 software.

The author for analyzing the data generated, used a combination of thematic and matrix analysis. For thematic analysis based on Braun & Clark (2006) recommendation, a six-stage process was used to extract themes and sub-themes from the data. Matrix analysis was employed to strengthen and support the thematic analysis.

Results

Most respondents worked between 48–55 hours per week. A few (n= 4) respondents indicated that they worked more than 60 hours per week, the overall trend was towards an average of 8 hrs per day from 12 noon to 8:30 pm. Since as per statutory regulations, the night curfew was imposed from 10 pm, the last delivery was inevitably made by 9 pm.

S. No.	Major Themes	Emerging Sub- Themes	Sample Respondent Statements
01.	Perceived threat	Lack of Resources	<i>We were given just 1 mask per day for 12-14 hrs duty (R2, R3, R15)</i> <i>I purchased hand sanitizer from my own money (R6)</i> <i>Getting bike filled for delivery was a time-consuming task (R4)</i>
		Excessive work load	<i>Majority of the restaurants were closed, the open restaurants had very less staff, so we had to wait for long time (R1)</i>

			<p><i>Daily on average I was making 18-20 deliveries per shift (R9)</i></p> <p><i>I worked 22 days consecutively without break. There are others who worked consecutively for more than 25 days (R7, R19)</i></p> <p><i>Earlier the weight per route was 2-3 kg but during covid it increased to 6-8 kg (R5)</i></p> <p><i>Number of deliveries per route increased from 3 to 7 on average (R13)</i></p> <p><i>The length of the route also increased from 6 kms to 15 kms (R14) and sometimes I delivered to places 18 km away too (R16)</i></p>
		Lack Of Empathy Among Consumers	<p><i>Many residential complexes did not allow me to use the lift (R10, R17)</i></p> <p><i>Customers did not even offer a glass of water (R8)</i></p>
		Lack Of Support From The Employer And/Or OFDA	<p><i>Faced numerous scheduling issues (R1, R2....)</i></p> <p><i>Getting salary was always an issue (R8, R 10)</i></p> <p><i>Promised incentives were either not paid at all or paid much lower than promised earlier (R6, R17, R18)</i></p> <p><i>I had to get the access pass from traffic police made by</i></p>

			<i>myself, at my own cost and time (R18)</i> <i>There is no medical or insurance policy for us (R3, R12)</i>
02.	Self-protective behaviour	Personal & Family Safety	<i>Purchased my own masks and sanitizers (R10)</i> <i>Got checked regularly on my own (R13, R17)</i> <i>Shifted family to village, lived here alone (R8, R17)</i>
		Human relationships	<i>I made friends with security guards and watchmen, who allowed me to rest with them during deliveries (R20)</i>
03.	Perceived benefits	Higher Earnings And Savings	<i>The income increased (R2, R5)</i> <i>My income more than doubled (R8, R26)</i> <i>For the first time I had some deposit in my jan dhan account (R9)</i>
		Enhanced Future Employability	<i>I learned about other delivery platforms giving more facilities (R11)</i> <i>I got promoted during corona due to my service quality (R9)</i>
		Better Future	<i>I m more confident of my skills now (R25)</i> <i>Since I survived this, the future has to be better (R19, R22)</i>

The emerged themes have been categorized into following groups:

1. Perceived threat

- 1.1 Lack of resources
- 1.2 Excessive work load
- 1.3 Lack of empathy among consumers
- 1.4 Lack of empathy from the employers/OFDAs

2. Self-protective behaviour

- 2.1 Personal and family safety
- 2.2 Human relationships

3. Perceived benefits

- 3.1 Higher earnings and savings
- 3.2 enhanced future employability
- 3.3 Better future

1. Perceived **Threats (Source Of Anxiety And Stress):**

The results of the study proved that the perceived threats are a major source of anxiety and stress among the FDPs, leading to feelings of helplessness.

1.1 Lack of resources: firstly, the respondents emphasized on the non-availability of basic protective material including masks and sanitizers. Further, fuel for the delivery vehicles was many times not readily available since the gas stations were either closed or working at reduced capacity. This, absence of basic necessities created bitterness and resentment among FDPs as some of them had to spend their own money on these essential items.

1.2 Excessive work load: the interviewees indicated that they were overburdened with the work, to the extent of 2-3 times their regular shifts and work timings. The work load increased in timings, distance covered, number of deliveries per route as well as the weight

they had to carry in their bags. Some of them (n=7) even had to assist the restaurants in packing the food items.

1.3 Lack of empathy among consumers: a significant number (n=11) of respondents had negative reviews of their customers. According to them, the customers, besides denying them entry in the residential complex, many a times misbehaved due to late delivery, gave poor ratings and refused to follow instructions about cashless transactions, thereby, delaying them further for their other deliveries.

1.4 Lack of empathy from the employers and/or OFDAs: a primary reason for the high stress levels among the FDPs was the lack of concern shown by their employers towards them. As has been well documented, many OFDAs partnered with grocery and other item delivery apps and websites. Thereby, increasing the carrying load of the FDPs. Further, the FDPs were not provided proper protection gear and transit passes due to which they were stopped by the authorities regularly.

2. Self-protective behaviour (fear related):

Weber (2006) asserted that feeling of fear acts as a motivator for an individual to take the requisite action to reduce the perception of risk. Perceived threat precedes the feeling of fear. Therefore, higher the perceived threat, stronger will be the feeling of fear appeal, resulting in the act of withdrawal or escape by the concerned individual (Addo et al., 2020; Rhodes, 2017; Warr, 1987).

2.1 Personal and family safety: Maslow's Need hierarchy posits the predominance of human safety as a basic need. During pandemic, when the world was in lockdown to slowdown the spread of the virus FDPs were actively delivering the food and other necessary items to the consumers. They undertook measures like shifting their families to the villages or other towns so as to protect them from the pandemic. Further, they invested in sanitizers, medical check-ups and masks at their own costs so as to safeguard them from the raging pandemic.

2.2 Human relationships: majority of respondents (n=16) found empathy in the building, residential complexes and the residential societies watchmen, security guards and workers. They allowed the FDPs to rest, relax and refresh before continuing their onward journey. A few interviewees (n=8) also attested to the fact that the security guards sometimes themselves delivered the goods to the exact address within the complex.

3. Perceived Benefits (Coping Behaviour):

3.3 Higher earnings and savings: we found that FDPs were anxious, overworked, and felt financially unstable, even though almost all of them (n=22) reported earning much higher during pandemic than pre-pandemic times. The researchers concluded that the financial anxiety was born out of uncertainty about future earnings. The FDPs realized that the pandemic induced lockdowns cannot continue for long duration, hence, they stressed about their future earnings. This anxiety was compounded by their challenges in taking care of both their households as sole earning member (n=14) and their professional lives. But the motivation of financial well-being was strong enough to enable them to cope with their highly demanding jobs.

3.4 Enhanced Future Employability: an un-forecasted benefit that FDPs derived during the pandemic was enhancing their knowledge about other delivery platforms. They were able to evaluate the HR practices of different platforms, their wage structure, working conditions etc. Furthermore, a few of them (n=5) communicated directly and regularly with senior managerial position holders within their organizations. This made them confident of their skills for better job opportunities.

3.5 Better Future: Almost 90% respondents (n=23) foresee a better future for them in post pandemic world. They believe that their loyalty towards the organization during the pandemic times will have a positive effect on the senior management. Additionally, 3-4 respondents have gained confidence to either start their own small business from their savings or look for better jobs in different sectors.

Discussion and implications

The study finds that online food ordering does impact the psychological well-being of a segment of population. For the consumers, ordering online is convenient and allows them to utilize their time in a productive manner or in recreational activities, thereby, improving their quality of life. During the pandemic, the OFDAs satisfied their consumers' demand for convenience and safety, yet they did not meet the expectations of their employees of 'business partners' i.e., the delivery personnel. The government authorities too mandated consumers to switch to online retail channels during the pandemic (Richards & Rickard, 2020). Further, exposing the delivery personnel to the rapidly spreading virus.

Food delivery services, require the delivery personnel to be the face of OFDAs, restaurants, and F&B outlets in the service encounter with the customers. Therefore, customer satisfaction and restaurants' willingness to work with these platforms are interlinked with the service

quality provided by the FDPs, their motivation and understanding of their responsibilities (Chen et al., 2014). The business models used in the OFDAs are predicated on cost minimization. By characterizing the FDPs as business partners, independent contractors or outsourcing to third party(ies) they are able to save on the insurance costs, Provident Fund etc. Simultaneously, it shifts training, medical, incentives and such costs on the FDPs. This results in a perilous working condition for the FDPs. This form of managerial jugglery has ramifications in the form of working for multiple OFDAs or even other delivery apps, temporary working, working on-call, having few work hours or tasks, or even rejecting the orders in the extreme cases.

Prior to the pandemic, exhaustive research identified the multifactorial nature of stress inducing reasons in delivery personnel viz. unpredictable time period, delay in wages, rude customers, congested roads, traffic conditions, late delivery penalties etc. Researchers have established a direct relationship between employee occupational stress levels and their anti-corporate citizenship behaviour wherein they criticize their employers in different forums, among peers, easily lose their temper, and resort to punitive discipline strategies (Yoon, 2002).

During covid-19 the FDPs, as individuals, displayed varied degrees of psychological resilience, and their ability to positively adapt to pandemic-challenged environment in order to safeguard themselves from stress. To manage stress, FDPs had adopted numerous coping strategies. The focus was on to reduce, since elimination was not possible, the negative feelings caused by an undesirable event. An interesting finding from the research was that both negative and positive emotions were experienced simultaneously by the FDPs during course of their work.

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Annexure:

Annexure-1

Semi-Structured Questionnaire:

1. Participants were asked what kind of work they are currently engaged in?
2. Demographic questions included age, gender, the area they live in (e.g., major city, inner regional, outer regional, remote, or very remote), education, and annual income.
3. Participants were asked whether they work with OFDA or a particular restaurant/F&B retailer, independent contractor/freelancer, temporary/short term, on-call, is the food delivery their only source of income, the locations they deliver food too, do they deliver any other products besides food.
4. Questions also addressed the number of hours worked per week on average, the number of days worked per week on average, average number of deliveries per day.
5. For stress related questions, items were used from Perceived Stress scale -14 (PSS-14). This scale was chosen as it is a widely used measure of psychological stress, which is likely experienced by the delivery personnel, due to the precarious nature of their work. Few of the questions were as follows “In the last month, how often have you felt that you were unable to control important things in your life?”, “In the last month, how often have you dealt successfully with irritating life hassles?”.

